Center of Nuclear Physical Data (CNPD), RFNC-VNIIEF

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Compilation activity

Within the period under report three transmission files TRANS (F033, F034, F035) were prepared and included into the EXFOR data library. Much attention was paid to the work on error correction in EXFOR library. TRANS F033 contained the corrected entries only (11). F034 and F035 included 9 corrected and 41 new entries.

Scanning of home journals "Yadernaya Fizika", "Izvestiya Academii Nauk" was continued. List of articles from "Izvestiya Academii Nauk" relevant for compilation is regularly made up and sent to the section.

CNPD members take part in the works on development of a Reference Database for Ion Beam Analysis (IBANDL). During the last period 238 files including the sets of experimental data on charged particle interaction with nuclei up to A=50 were introduced into the library.

EXFOR - Editor software

The works on software development (EXFOR-Editor) intended to process and introduce experimental data to the EXFOR library were continued.

Creation of EXFOR – Editor was generally completed.

1. All dialog windows have been designed.
2. All the modes of data processing (creation of a new entry, data input, data editing and data checking) were implemented.
3. New Exfor-Lexfor help system (version February, 2008) is provided now.
4. Help system for Exfor-Editor was updated according to the last modifications.

It is planned in future to provide some small additions and error corrections only. The final version of EXFOR-Editor was presented to NDS members in November last year. It was recommended to distribute the program among the centers of nuclear data.

Within the framework of existing software a new application was developed - EXFOR – Wizard. It is intended for non-advanced users. Using specially designed patterns one can create a file in the Exfor format by forming consequently bibliographical part and a numerical data section. While creating the program some principles and procedures implemented in EXFOR-Editor were used.

Designing in a form of a separate application will allow more effective use of the program for training purposes.